

Crackle, Flash, Boom!



Thunderclouds form when warm, moist air rises very fast and very high, usually at the end of a hot day. Thunderclouds can be as big as 10 miles high. As the warm air rises, it cools. Water vapor in the air forms water droplets and even ice crystals, and the clouds get very dark.



It's windy inside a thundercloud. As warm air rises and cool air falls, the ice crystals and water droplets in the cloud rub and bump each other, creating electricity. Giant sparks can jump from the top of the cloud to the bottom, or from one cloud to another, or from the cloud to the ground. A bolt of lightning might be several miles long, but it is just an inch wide.



Lightning is very hot—even hotter than the sun. It heats up the air so fast that the air expands outward in all directions, making a huge bang, like a giant, bursting balloon. This bang is the sound we call thunder.



Thunder from the different parts of a long bolt of lightning reaches your ears at different times. At first you may hear a loud crash, then the thunder rumbles and rolls. Thunder is loud and scary, but it won't hurt you.